



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,730	03/16/2004	Sang-Yeon Pyo	1594.1369	1852
21171	7590	03/23/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			GRAVINI, STEPHEN MICHAEL	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

8N

Office Action Summary**Application No.**

10/800,730

Applicant(s)

PYO ET AL.

Examiner

Stephen Gravini

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
 4a) Of the above claim(s) 1-13 and 21-25 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 14-20 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 14-15, 17, and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller (US 4,154,003). Muller is considered to disclose the claimed invention comprising:

a water tub **12**; and

a drying apparatus **10** provided on an outer surface of the water tub, the drying apparatus including:

a condensing duct **16** or **110** provided on a rear surface of the water tub; and

at least one air guide **77**, **80**, **106**, **155**, or **156** to partition an inner space of the condensing duct into a plurality of condensing paths which communicate with each other in series. Muller is also considered to disclose a first air guide **77** or **94** and a second air guide **78** or **96** which are longitudinally arranged in the condensing duct so as to partition the inner space of the condensing duct into a first condensing path, a second condensing path and a third condensing path, a condensing nozzle **132** and **150**, a blower duct **38** or **40**, and a blower fan **36** with heater **82**.

Claim Rejections - 35 USC § 103

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller in view of Matsumoto et al. (US 5,768,730). Muller is considered to disclose the claimed invention, as discussed above under the anticipatory rejection, except for the claimed

Art Unit: 3749

ultrasonic atomizing unit. Matsumoto, another washing machine, is considered to disclose an ultrasonic atomizing unit at column 10 lines 1-15. It would have been obvious to one skilled in the art to combine the teachings of Muller with the ultrasonic atomizing unit, considered disclosed in Matsumoto for the purpose of preventing degradation of a pump so cleaning can be effectively accomplished.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller in view of Czech (US 3,274,807). Muller is considered to disclose the claimed invention, as discussed above under the anticipatory rejection, except for the claimed vapor adsorption. Czech, another washing machine, is considered to disclose vapor adsorption at column 3 lines 13-44. It would have been obvious to one skilled in the art to combine the teachings of Muller with vapor adsorption, considered disclosed in Czech for the purpose of purifying a cleaning agent within the washing machine by removing colorants, odors, fatty acids and the like.

Response to Arguments

Applicant's arguments filed February 28, 2005 have been fully considered but they are not persuasive.

anticipation

Applicants argue that primary reference Muller does not anticipate the claimed invention because the water separation arrangement **77**, the siphon **80**, the drain line **106**, or the siphon **156** are downstream of either the draining system **16** or the drain line **110** and can not partition an inner space of either the draining system **16** or the drain line **110**.

Examiner broadly and reasonably construes the claimed partition recitation to merely separate structures, based on the specification discussion. In this case each of the argued elements is considered to structurally separate or partition another element.

The anticipatory rejection is considered proper and maintained.

obviousness

Applicants assert that neither secondary references Matsumoto or Czech add anything to primary reference Muller to remedy the argued deficiency. Both secondary references are considered to contain features that would obviate the claimed invention as discussed in the rejections above. The rejection is considered proper and maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3749

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 571 272 4875. The examiner can normally be reached on normal weekday business hours (east coast time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira S. Lazarus can be reached on 571 272 4877. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SMG
March 18, 2005

